

Amendment to the Claims:

In compliance with the Revised Amendment Format, a complete listing of claims is provided herein.

1. (Currently Amended) A method of balancing workload of a grid computing environment, grid computing enabling virtualization of distributed computing and data resources to create a single system image from a plurality of systems, said method comprising:

obtaining scheduler information, by a manager daemon of one within one system of a plurality of systems in a grid computing environment, scheduler information from a scheduler of another system of the grid computing environment, said scheduler information including current free nodes of the another system, job queue of waiting jobs for the another system, shadow time for the next waiting job of the another system indicating how long the job needs to wait for resources, and one or more resources currently unavailable due to shadow time, wherein the plurality of systems are at least one of heterogeneous and geographically distant from each other; and

performing by the manager daemon workload balancing of at among at least two systems of the plurality of systems in the grid computing environment, each system of the at least two systems comprising a scheduler to schedule workload on its system, said workload balancing using at least a portion of the obtained scheduler information, and wherein the workload balancing comprises backfill scheduling a job, said backfill scheduling allowing the job to run out of order as long as it does not affect the start time of another job scheduled to execute.

2. (Previously Presented) The method of claim 1, wherein the scheduler on each system is adapted to perform backfill scheduling.

3. (Previously Presented) The method of claim 1, wherein scheduler information is obtained from at least two schedulers, and wherein one scheduler of the at least two schedulers is a different scheduler from at least one other scheduler of the at least two schedulers.

4-5. (Canceled)

6. (Previously Presented) The method of claim 1, wherein the workload balancing includes:

determining which system of said at least two systems a job is to be assigned; and
assigning the job to the determined system.

7. (Previously Presented) The method of claim 1, wherein the workload balancing includes:

removing a job from one system of the at least two systems; and
assigning the job to another system of the at least two systems.

8-10. (Canceled)

11-12. (Canceled)

13-16. (Canceled)

17-18. (Canceled)

19-20. (Canceled)